

REMARKS

Applicant appreciates the continued thorough examination of the present application that is reflected in the non-final Official Action of May 28, 2008. Applicant also appreciates the Examiner's indication in the "Response to Arguments" section of the Detailed Action that Applicant's argument in the Pre-Appeal Brief Request for Review have been fully considered and are persuasive, and that the previous final rejection has been withdrawn.

In the new, non-final Official Action, the previous rejection under 35 USC §102(e) over U.S. Patent Application Publication 2005/0260948 to Regulinski et al. has been replaced by a rejection under 35 USC §103(a) over Regulinski et al. in view of U.S. Patent 6,570,858 to Emmons, Jr. et al. Applicant respectfully submits, however, that even if it was proper to combine these diverse references, Emmons, Jr. et al. does not supply the missing teachings, as will be explained in more detail below.

Since the present application has already been through a pre-appeal review, Applicant will not repeat all of the analysis that was presented in Applicant's Request for Reconsideration of September 5, 2007 or in Applicant's Pre-Appeal Brief Request for Review of December 19, 2007. However, should another pre-appeal or appeal be necessary, Applicant incorporates this analysis by reference as if set forth fully herein.

As was noted in Applicant's Pre-Appeal Brief Request for Review, Claim 1 recites that wireless communications are both transmitted and received by an ancillary terrestrial network over the same downlink radiotelephone frequency in Time-Division Duplex (TDD) mode. The remaining independent Claims 8, 15, 22, 29 and 36 contain similar recitations. The Official Action now appears to concede, in the Paragraph bridging Pages 3 and 4, that Regulinski et al. does not describe or suggest these recitations, but alleges Emmons, Jr. et al. does so.

Applicant respectfully submits, however, that this is not the case, because in Emmons, Jr. et al. the terrestrial repeater **30** uses separate downlink and uplink frequency bands **38** and **40**, both of which employ a TDD frame structure. Emmons, Jr. et al. does not suggest using the same downlink radiotelephone frequency band in TDD mode for wireless communications that are both transmitted and received by an ancillary terrestrial network, as recited in Claim 1. More specifically, Emmons, Jr. et al. describes a system (see, for example, Figure 1), wherein a communications satellite **22** and a terrestrial repeater **30** both

operate using separate uplink and downlink frequency bands **40** and **38**, respectively. Note Column 3, lines 53-62 of Emmons, Jr. et al.:

In a preferred embodiment, repeater **30** is located in first coverage area **34** and is in radio communication with first satellite **22** over a first link **36**. First link 36 includes a first frequency band, downlink frequency band 38, over which radio communication signals are transmitted from first satellite 22 to repeater 30. First link 36 also includes a second frequency band, uplink frequency band 40, over which radio communication signals are transmitted from repeater 30 to satellite 22. (Emphasis added.)

Thus, the repeater uses separate and distinct uplink and downlink frequency bands. Moreover, as noted at Column 4, lines 8-22 of Emmons, Jr. et al.:

In the preferred embodiment, first satellite **22** employs a time division duplex (TDD) frame structure, and downlink and uplink frequency bands, **38** and **40**, respectively, encompass a limited portion of the radio frequency (RF) spectrum allocated to first satellite **22**. Downlink and uplink frequency bands, **38** and **40**, may be close together. However, as discussed above, interference between frequency bands **38** and **40** is largely avoided, through the employment of the TDD frame structure at the expense of spectral efficiency. In the preferred embodiment, downlink and uplink frequency bands, **38** and **40**, are effectively reused in second link **42**, to take advantage of the available spectral capacity while mitigating the effects of fading through the use of terrestrial repeater **30**.

Thus, even assuming for the sake of argument that it was somehow obvious to add the terrestrial repeater **30** of Emmons, Jr. et al. in place of or instead of the terrestrial node **119** of Regulinski et al., the recitations of the independent claims would not be described or suggested. Stated succinctly, the terrestrial repeater **30** of Emmons Jr. et al. uses separate downlink and uplink frequency bands **38** and **40**, and uses a TDD structure therebetween. Thus, Emmons, Jr. et al. does not describe or suggest that wireless communications are both transmitted and received by an ancillary terrestrial network over the same downlink radiotelephone frequency in TDD mode, as recited in the independent claims.

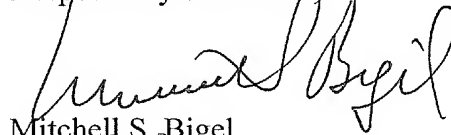
The dependent claims are patentable at least per the patentability of the independent claims from which they depend. Moreover, many of the dependent claims are separately patentable. However, in the interest of brevity and in view of the clear patentability of the independent claims, the dependent claims will not be analyzed separately. Applicant reserves the right to do so, however, in a subsequent response as necessary.

Applicant also wishes to discuss new Claims 43-54. These claims have been added to highlight other differences between the terrestrial repeater **30** of Emmons, Jr. et al. and an

ancillary terrestrial component **140**, according to some embodiments of the present invention. Briefly, the terrestrial repeater **30** of Emmons, Jr. et al. is configured to merely relay the downlink and uplink communications **38** and **40** from the satellite **22** to the subscriber **32**, as illustrated, for example, in Figure 1 of Emmons, Jr. et al. and the above-quoted passages thereof. In sharp contrast, as illustrated, for example, in Figure 13 of the present application, an ancillary terrestrial component **140** of some embodiments of the present invention is not a mere relay for the satellite **110**, and does not communicate wirelessly with the satellite. Rather, the ancillary terrestrial component **140** uses a wired terrestrial link **142** to communicate with terrestrial infrastructure, so as to obtain wireless communications that are transmitted to the radiotelephones from the terrestrial infrastructure and to provide the wireless communications that are received from the radiotelephones to the terrestrial infrastructure. Accordingly, Claims 43-54 provide separate bases of patentability, because if the terrestrial repeater **30** of Emmons, Jr. et al. is substituted into Regulinski et al., the recitations of Claims 43-54 would also not be described or suggested.

In conclusion, Applicant appreciates the Examiner's indication that Applicant's earlier arguments were persuasive. Applicant has now shown, however, that Emmons, Jr. et al. does not supply the teachings that are missing from Regulinski et al., even if Emmons, Jr. et al.'s terrestrial repeater was somehow substituted into Regulinski et al. Accordingly, all of the independent claims are patentable and many of the dependent claims provide separate bases for patentability. Applicant, therefore, respectfully requests withdrawal of the outstanding rejection and allowance of the present application. If, in the opinion of the Examiner, a telephonic conference would expedite the examination of this matter, the Examiner is invited to call the undersigned attorney at (919) 854-1400.

Respectfully submitted,



Mitchell S. Bigel
Registration No. 29,614
Attorney for Applicant(s)

Customer Number 20792

Myers Bigel Sibley & Sajovec, P.A.
P.O. Box 37428
Raleigh, NC 27627
919-854-1400
919-854-1401 (Fax)